

ABSTRACT OF THE DISCLOSURE

The present invention provides a semiconductor integrated-circuit device capable of achieving higher-density integration and faster operation, and a CMOS circuit operational speeding-up method for easily achieving the operating speeds of CMOS circuits, including existing one.

A signal transferring path includes a plurality of CMOS-constructed logic gate circuits provided between one pair of flip-flop circuits for acquiring and holding signals by use of clock signals. The signal transferring path includes a first and a second signal transferring path. The first signal transferring path is constituted by enhancement-type MOSFETs and has a signal transferring delay time equal to, or less than, a permissible signal transferring delay time. The second signal transferring path is configured such that, among the above-mentioned plurality of logic gate circuits, a logic gate circuit having a delay time longer than the above-mentioned permissible signal transferring delay time when constituted using enhancement-type MOSFETs is replaced with a depletion-type MOSFET so that the second signal transferring path may provide a signal transferring delay time equal to or less than the permissible signal transferring delay time mentioned above.